

any overpayment, to Deposit Account 06-1205.

The Examiner is respectfully requested to amend the above-identified application as follows:

IN THE CLAIMS:

Please cancel Claims 11 and 27, without prejudice or disclaimer of the subject matter presented therein.

Please amend Claims 3, 5, 7, 9, 13, 15, 17, 19, 21, 23, 25, 29, 31, 33, 35, and 36 to read as follows. A marked-up copy of the amended claims, showing the changes made thereto, is attached.

Sub D2
3. (Twice Amended) An image pickup device comprising:

a color filter array comprising color filters arranged in horizontal and vertical directions;

B1 Cont
a plurality of pixels including photoelectric converting elements arranged in the horizontal and vertical directions, respectively corresponding to the color filters;

a plurality of vertical read-out units provided for a plurality of pixels arranged in the vertical direction, said plurality of vertical read-out units arranged to read out signals from the plurality of pixels arranged in the vertical direction;

a horizontal read-out unit arranged to read out sequentially the signals from said plurality of vertical read-out units in the horizontal direction;

an output unit arranged to output sequentially the signals from said horizontal read-out unit; and

*21
mod
Panel*
a control unit arranged to divide the plurality of pixels on a unit basis of a predetermined number of lines, which includes a plurality of first lines and a plurality of second lines, and to add the signals of pixels of the plurality of first lines and the signals of pixels of the plurality of second lines, in order to control pixels of the predetermined number of lines so as to generate one kind of color difference signal.

B2
Sub 4
5. (Amended) An image pickup device according to claim 3 wherein signal charges of two predetermined pixels that are mutually adjacent in the vertical direction, among the plurality of pixels arranged corresponding to the color filters, are added and an image signal corresponding to the added signal charges is outputted from said output unit.

Sub 62
*B3
Cont*
7. (Amended) An image pickup device according to claim 5, wherein the added signal charges of the two pixels are further added with signal charges of two predetermined pixels

E2
cancel
B3
cancel

that are present in a direction diagonal to the first-mentioned two pixels in a column adjacent to that of the first-mentioned two pixels, and an image signal corresponding to added signal charges of four pixels is outputted from said output unit.

B4

Sub 4

9. (Amended) An image pickup device according to claim 7, wherein an image signal corresponding to signal charges is outputted from said output unit by combining a method of adding the signal charges in the vertical direction and in the diagonal direction and a method of further adding, to the signal charges added in the vertical direction, signal charges in the vertical direction.

B5

13. (Amended) An image pickup device according to claim 5, wherein color filters corresponding to the two predetermined pixels are a combination of cyan and green and a combination of yellow and magenta, or a combination of yellow and green and a combination of cyan and magenta.

B6
cancel

15. (Amended) An image pickup device according to claim 7, wherein the color filters corresponding to the two predetermined pixels are a combination of cyan and green and a combination of yellow and magenta, or a combination of yellow and

B6
com

green and a combination of cyan and magenta.

B7

17. (Amended) An image pickup device according to claim 9, wherein the color filters corresponding to the two predetermined pixels are a combination of cyan and green and a combination of yellow and magenta, or a combination of yellow and green and a combination of cyan and magenta.

B8

19. (Amended) An image pickup device according to claim 3, further comprising a plurality of electrodes each of which is connected commonly to every fourth pixel in the vertical direction, and which are adapted to control read-out of signal charges from the pixels to said plurality of vertical read-out units and to control transfer of the signal charges from said vertical read-out units to said horizontal read-out unit.

B9

21. (Amended) An image pickup device according to claim 5, further comprising a plurality of electrodes each of which is connected commonly to every fourth pixel in the vertical direction, and which are adapted to control read-out of signal charges from the plurality of pixels to said vertical read-out units and to control transfer of the signal charges from said vertical read-out units to said horizontal read-out unit.

23. (Amended) An image pickup device according to claim 7, further comprising a plurality of electrodes each of which is connected commonly to every fourth pixel in the vertical direction, and which are adapted to control read-out of signal charges from the plurality of pixels to said vertical read-out units and to control transfer of the signal charges from said vertical read-out units to said horizontal read-out unit.

25. (Amended) An image pickup device according to claim 9, further comprising a plurality of electrodes each of which is connected commonly to every fourth pixel in the vertical direction, and which are adapted to control read-out of signal charges from the plurality of pixels to said vertical read-out units and to control transfer of the signal charges from said vertical read-out units to said horizontal read-out unit.

29. (Amended) An image pickup device according to claim 13, further comprising a plurality of electrodes each of which is connected commonly to every fourth pixel in the vertical direction, and which are adapted to control read-out of signal charges from the plurality of pixels to said vertical read-out units and to control transfer of the signal charges from said

B12
vertical read-out units to said horizontal read-out unit.

B13
31. (Amended) An image pickup device according to claim 15, further comprising a plurality of electrodes each of which is connected commonly to every fourth pixel in the vertical direction, and which are adapted to control read-out of signal charges from the plurality of pixels to said vertical read-out units and to control transfer of the signal charges from said vertical read-out units to said horizontal read-out unit.

B14
33. (Amended) An image pickup device according to claim 17, further comprising a plurality of electrodes each of which is connected commonly to every fourth pixel in the vertical direction, and which are adapted to control read-out of signal charges from the plurality of pixels to said vertical read-out units and to control transfer of the signal charges from said vertical read-out units to said horizontal read-out unit.

B15
35. (Amended) An image pickup device according to Claim 3, wherein said control controls the plurality of pixels so as to generate alternately different kinds of color difference signals on the predetermined number of lines basis.

Sub 31
36. (Amended) An image pickup device according to
Claim 3, further comprising:

2/15
a signal processing unit, which subjects the signals
outputted from said output unit to an image processing; and
an image display unit, which displays image
information from said signal processing unit.

REMARKS

This application has been reviewed in light of the Office Action dated January 17, 2001. Claims 1-10, 12-26, and 28-36 remain pending in this application, with Claim 3 having been amended to define more clearly what Applicants regard as their invention, and with Claims 5, 7, 9, 13, 15, 17, 19, 21, 23, 25, 29, 31, 33, 35, and 36 having been amended purely as to matters of form. Claims 11 and 27 have been canceled, without prejudice or disclaimer of the subject matter presented therein. Claims 1, 3, and 4 are in independent form. Favorable reconsideration is requested.

First, Applicants acknowledges with appreciation the indication that Claims 1, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, and 34 have been allowed. This leaves Claims 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, and 36 unallowed, with Claim 3 being the only unallowed